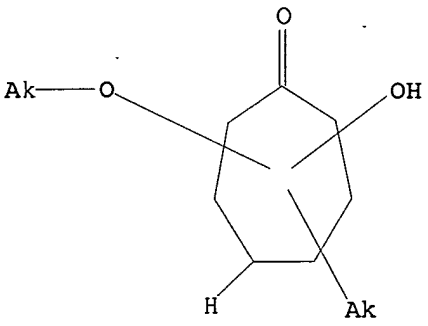
```
=> d his

     (FILE 'HOME' ENTERED AT 14:23:16 ON 24 MAR 2005)

     FILE 'REGISTRY' ENTERED AT 14:23:27 ON 24 MAR 2005
L1                STRUCTURE UPLOADED
L2            0 S L1
L3            5 S L1 FULL

     FILE 'CAPLUS' ENTERED AT 14:24:19 ON 24 MAR 2005
L4            3 S L3
```

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 14:23:43 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 503 TO ITERATE

100.0% PROCESSED 503 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 8715 TO 11405
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

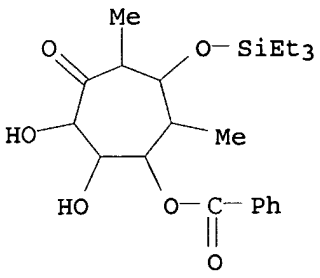
=> s l1 full
FULL SEARCH INITIATED 14:23:47 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 10328 TO ITERATE

100.0% PROCESSED 10328 ITERATIONS 5 ANSWERS
SEARCH TIME: 00.00.01

L3 5 SEA SSS FUL L1

=> d scan

L3 5 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Cycloheptanone, 4-(benzoyloxy)-2,3-dihydroxy-5,7-dimethyl-6-[(triethylsilyl)oxy]- (9CI)
MF C22 H34 O6 Si

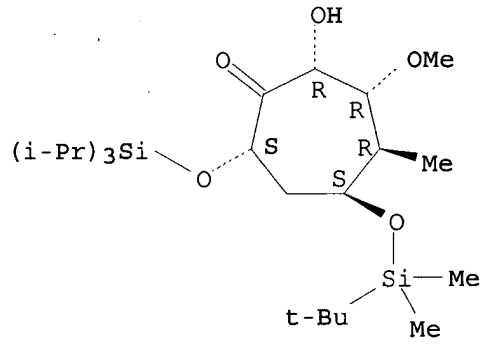


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):4

L3 5 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Cycloheptanone, 5-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-hydroxy-3-methoxy-4-methyl-7-[[tris(1-methylethyl)silyl]oxy]-, (2R,3R,4R,5S,7S)-(9CI)
MF C24 H50 O5 Si2

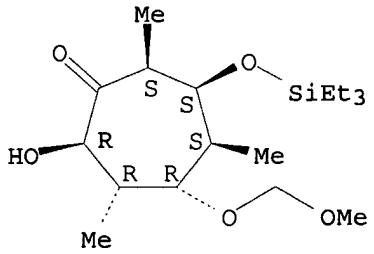
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 5 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Cycloheptanone, 2-hydroxy-4-(methoxymethoxy)-3,5,7-trimethyl-6-[(triethylsilyl)oxy]-, (2α,3β,4β,5α,6α,7.alpha.)- (9CI)
MF C18 H36 O5 Si

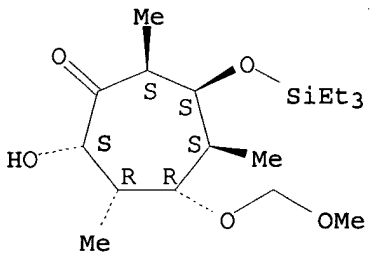
Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 5 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Cycloheptanone, 2-hydroxy-4-(methoxymethoxy)-3,5,7-trimethyl-6-[(triethylsilyl)oxy]-, (2α,3α,4α,5β,6β,7β)- (9CI)
MF C18 H36 O5 Si

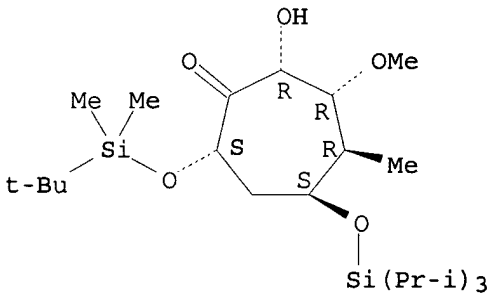
Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 5 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Cycloheptanone, 7-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-hydroxy-3-methoxy-4-methyl-5-[[tris(1-methylethyl)silyl]oxy]-, (2R,3R,4R,5S,7S)-(9CI)
MF C24 H50 O5 Si2

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION

FULL ESTIMATED COST 161.33 161.54

FILE 'CAPLUS' ENTERED AT 14:24:19 ON 24 MAR 2005

FILE COVERS 1907 - 24 Mar 2005 VOL 142 ISS 13
FILE LAST UPDATED: 23 Mar 2005 (20050323/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3
L4 3 L3

=> d 1-3 ibib abs hitstr

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:569891 CAPLUS
DOCUMENT NUMBER: 141:123561
TITLE: Preparation of chemical synthons and intermediates in syntheses of natural products
INVENTOR(S): Fuchs, Philip L.; Meyers, David J.; Torres, Eduardo; Park, Taesik; Kim, In C.; Chen, Yuzhong; Lantrip, Douglas; Evarts, Jerry B.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 151 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004138485	A1	20040715	US 2003-662781		20030915
PRIORITY APPLN. INFO.:			US 2002-410421P	P	20020913

OTHER SOURCE(S): MARPAT 141:123561

AB The invention provides novel six and seven-carbon termini-differentiated polypropionate stereotetrads and stereopentads [I-XV; R1 = C1-5 alkyl; R2, R3 = H, C1-4 alkyl, or blocking group, preferably a silyl-containing blocking group such as trimethylsilyl or tert-butyldimethylsilyl group; R = Ph or substituted Ph group wherein the substituted Ph group is substituted in one instance at the o-, m- or p-position of the Ph group with C1-4 alkyl, halogen (F, Cl, Br, or iodo), NO2, NH2, HO, C1-4 alkyloxy-carbonyl, C1-4 alkoxy, or acyl group], and stereoisomers, pharmaceutically acceptable salts, solvates, and polymorphs thereof which are useful in syntheses of natural products. The invention also provides a novel alkylative sulfenylation-desulfonylation process that efficiently transforms

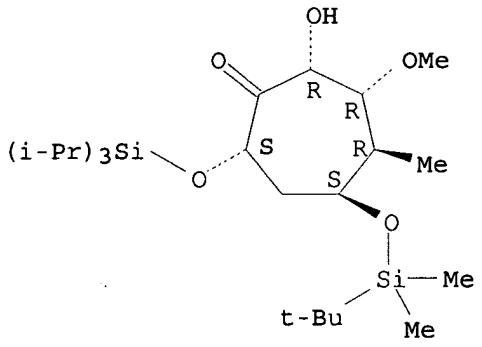
enantiopure epoxyvinyl sulfones to syn and anti dienylsulfides in two operations. Thus, to a solution of (1R)-3-(phenylsulfonyl)-2,4-cycloheptadien-1-ol (822 mg, 3.29 mmol) in THF (30 mL) at -78° was slowly added MeLi in Et2O (1.4 M, 5.9 mL, 8.22 mmol) over a period of 30 min using a syringe pump and the resulting orange solution was left stirring for 30 min to ensure complete reaction, rapidly treated with a solution of Ph disulfide (1.8 g, 8.22 mmol) in THF (4 mL) via cannula, warmed to 25°, left stirring for 6 h, and treated with saturated NH4Cl (50 mL) and then with Et2O (100 mL) to give, after workup and silica gel chromatog., to give 835 mg of pure (1R,2R,3R)-3-Benzenesulfonyl-2-methyl-5-phenylsulfanylcyclohept-4-enol (68% yield).

IT **724733-37-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of chemical synthons and intermediates for synthesis of natural products by alkylative sulfenylation-desulfonylation to enantiopure epoxyvinyl sulfones to syn and anti dienylsulfides)

RN 724733-37-3 CAPLUS

CN Cycloheptanone, 5-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-hydroxy-3-methoxy-4-methyl-7-[[tris(1-methylethyl)silyl]oxy]-, (2R,3R,4R,5S,7S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:599225 CAPLUS

DOCUMENT NUMBER: 139:276649

TITLE: Functionality propagation by alkylative oxidation of cross-conjugated cycloheptadienyl sulfones

AUTHOR(S): Torres, Eduardo; Chen, Yuzhong; Kim, In Chul; Fuchs, P. L.

CORPORATE SOURCE: Department of Chemistry, Purdue University, West Lafayette, IN, 47907, USA

SOURCE: Angewandte Chemie, International Edition (2003), 42(27), 3124-3131
CODEN: ACIEF5; ISSN: 1433-7851

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:276649

AB Alkylative sulfenylation-desulfonylation efficiently transforms an enantiopure epoxyvinyl sulfone into syn and anti dienyl sulfides in two operations. This reaction permits the functionalization of all seven atoms of a cycloheptane system, eventually leading to polypropionate stereotetrads and stereopentads for use in natural product synthesis.

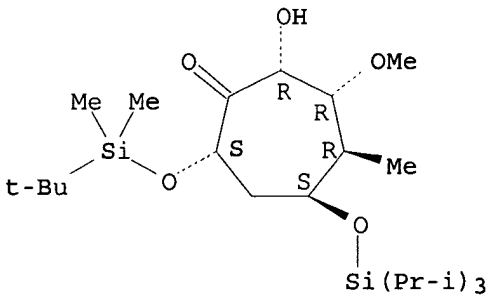
IT **606128-79-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(functionality propagation by alkylative oxidation of cross-conjugated cycloheptadienyl sulfones)

RN 606128-79-4 CAPLUS

CN Cycloheptanone, 7-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-hydroxy-3-methoxy-4-methyl-5-[[tris(1-methylethyl)silyl]oxy]-, (2R,3R,4R,5S,7S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 108 THERE ARE 108 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:255079 CAPLUS

DOCUMENT NUMBER: 118:255079

TITLE: Organoiron-templated stereocontrolled alkylation of enolates: functionalization of cycloheptadienones to give useful synthetic building blocks

AUTHOR(S): Pearson, Anthony J.; Chang, Kieyoung

CORPORATE SOURCE: Dep. Chem., Case West. Reserve Univ., Cleveland, OH, 44106, USA

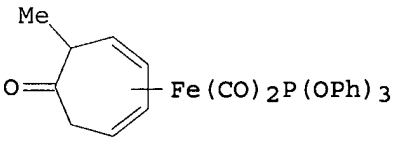
SOURCE: Journal of Organic Chemistry (1993), 58(5), 1228-37
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 118:255079

GI



I

AB Conversion of η4-cycloheptatriene-Fe(CO)2P(OPh)3 to ketocycloheptadiene-Fe(CO)2P(OPh)3 complex I was accomplished by hydroboration followed by Swern oxidation Methylation and hydroxylation of the enolate from I proceeds with complete stereoselectivity, anti to the metal moiety, and introduction of two Me or hydroxyl groups at the α and α' positions was accomplished in high overall yield. Reduction of the ketone group on these complexes occurs with high stereoselectivity and is controlled by the boat conformation adopted by these complexes. The products of these reaction sequences were demetalated to give cycloheptadiene derivs. that were further functionalized to give a

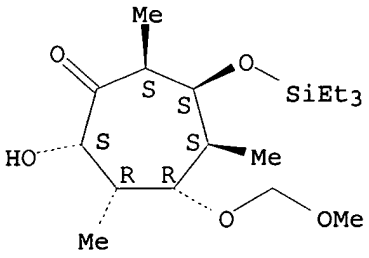
C(9)-C(14) subunit of calyculin A1 and a C(19)-C(25) subunit of swinholide A.

IT **146951-54-4P 146986-92-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reduction of)

RN 146951-54-4 CAPLUS

CN Cycloheptanone, 2-hydroxy-4-(methoxymethoxy)-3,5,7-trimethyl-6-[(triethylsilyl)oxy]-, (2α,3α,4α,5β,6β,7β)- (9CI) (CA INDEX NAME)

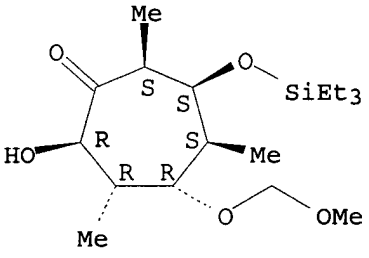
Relative stereochemistry.



RN 146986-92-7 CAPLUS

CN Cycloheptanone, 2-hydroxy-4-(methoxymethoxy)-3,5,7-trimethyl-6-[(triethylsilyl)oxy]-, (2α,3β,4β,5α,6α,7.alpha.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT **146951-66-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and ring cleavage of)

RN 146951-66-8 CAPLUS

CN Cycloheptanone, 4-(benzoyloxy)-2,3-dihydroxy-5,7-dimethyl-6-[(triethylsilyl)oxy]- (9CI) (CA INDEX NAME)